UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,400	01/30/2004	Francesco Rimi	02CT44853427	3790
27975 7590 08/16/2007 ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.			EXAMINER	
1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE BARC		BARON,	HENRY	
P.O. BOX 3791 ORLANDO, FI			ART UNIT	PAPER NUMBER
			2616	
			MAIL DATE	DELIVERY MODE
			08/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	•	· · · · · · · · · · · · · · · · · · ·	
	Application No.	Applicant(s)	
	10/768,400	RIMI ET AL.	
Office Action Summary	Examiner	Art Unit	
	Henry Baron	2616	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	B DATE OF THIS COMMUNION 1.136(a). In no event, however, may a right of the community of th	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status	•	·	
1)⊠ Responsive to communication(s) filed on 3	0 January 2004.		
	This action is non-final.		
3) Since this application is in condition for allo	wance except for formal matt	ers, prosecution as to the merits is	
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims	,		
4)⊠ Claim(s) <u>18-37</u> is/are pending in the applica	ation.		
4a) Of the above claim(s) is/are without		:	
5) Claim(s) is/are allowed.	·	·	
6)⊠ Claim(s) <u>18-27 and 33-37</u> is/are rejected.			
7) Claim(s) <u>28-32</u> is/are objected to.		,	
8) Claim(s) are subject to restriction an	d/or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exam	niner.	•	
10)⊠ The drawing(s) filed on <u>30 January 2004</u> is/	are: a)□ accepted or b)□ o	bjected to by the Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abeyar	ice. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the cor		• • • • • • • • • • • • • • • • • • • •	
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached	J Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for fore a)⊠ All b)□ Some * c)□ None of:	eign priority under 35 U.S.C. §	119(a)-(d) or (f).	•
1. Certified copies of the priority docum	ents have been received.		
2. Certified copies of the priority docum		•	
3. Copies of the certified copies of the p	•	received in this National Stage	
application from the International But			
* See the attached detailed Office action for a	list of the certified copies not	received.	
		•	
Attachment(s)	_		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 		Summary (PTO-413) s)/Mail Date	
3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>Q₹//)6*200</u> 2.		nformal Patent Application	

Application/Control Number: 10/768,400

Art Unit: 2616

Detailed Action

Objection

- 1. The abstract of the disclosure is objected to because the following minor informality. The last sentence should read, "The invention is particularly *applicable*..." instead of "application". Correction is required. See MPEP § 608.01(b).
- 2. The specification of the disclosure is objected to because the following minor informality.

 Paragraph [0044] should refer to Figure 3 (block 22) and not Figure 1. Correction is required. See MPEP § 608.01(b).

Nonstatutory Double Patenting Rejection

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thonngton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 3. Claims 23,25, and 36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 and 12 of U.S. Patent No. 7,123,929.
- 4. Both sets of claims, application claims 23,25 and patent claim 6 and application claim 36 and patent claim 12 teach, respectively, of a device and computer product with one correlator; detector or unit for energy determination; and processor.
- 5. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims 23,25 merely broadens the scope of claim 6 of patent 7,123,929 by eliminating the element of one correlator configured for correlating the received signal; first codes of

synchronization codes searched for one maximum energy value, and processor module performs fine slot synchronization on the remaining codes.

- 6. In a similar manner the instant application claim 36 merely broadens the scope of claim 12 of patent 7,123,929 by eliminating the element of one correlator configured for correlating the received signal; first codes of synchronization codes searched for one maximum energy value, and processor module performs fine slot synchronization on the remaining codes.
- 7. It has been held that omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 1698 USPQ 375 (Bd. App. 1969); the omission of a reference element whose function is not needed would be obvious to one skilled in the art.
- 8. The claimed language of claims 23,25 and 36 merely broadens the claimed subject matter of claims 6 and 12 of the patent, respectively.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 10. Claims 18 –27 and 33 37 are rejected under 35 U.S.C. 102(e) in view of Avellone (U.S. Patent 7,123,929).
- 11. With regards to Claims 18 and 36, Avellone teaches of a computer-readable medium having computer-executable instructions method and a cellular communications method for a cellular communications system using a synchronization codes where during a first time interval, performing slot

Application/Control Number: 10/768,400

Art Unit: 2616

synchronization using one correlator to correlate a received signal with synchronization codes in a primary sequence, corresponding synchronization values are generated; and during a second time interval, performing frame synchronization and cell codegroup identification using one correlator to correlate the received signal with synchronization codes in a secondary sequence to generate corresponding synchronization values. (1: [0032-0047] read steps 1 coarse and 2 fine).

- 12. Regarding Claim 19, Avellone teaches enabling one correlator by generating an enable signal during the second time interval. (5:[0015 0020]).
- 13. With regards to Claim 20, 24, and 37, Avellone further teaches of arranging the secondary sequence into a first and second portion. (4: [0030 0042]) and providing the first portion to the first filter and the second portion to the second filter. (4: [0042 0045], 5: [0015-0020] and Figure 3, reference numeral 111 and 117).
- 14. With regards to Claim 21, Avellone teaches switching from the correlation of one synchronization code in the secondary sequence to another by changing values of the second portion of the secondary sequence. (5:[0005-0010]).
- 15. Regarding Claim 22, Avellone teaches where the primary sequence has weights associated and changing the signs on at least one of these weights switch from the primary sequence to the first portion of the secondary sequence. (1: [0060] 2[0020]).
- 16. Regarding Claim 23, Avellone teaches of a cellular communications device for a cellular communications system using synchronization codes comprised of one correlator for correlating a received signal with synchronization codes in a primary sequence during a first time interval that generates corresponding synchronization values, and for correlating the received signal with synchronization codes in a secondary sequence during a second time interval that generates corresponding synchronization values and a processor for performing slot synchronization, frame synchronization, and

Art Unit: 2616

cell codegroup identification based upon the corresponding synchronization values.(3:[0018] and 8: [0030-0068]).

- 17. In reference to Claim 25 and 26, Avellone teaches of a cellular communications device for a cellular communications system using a synchronization codes with one correlator for correlating a received signal and synchronization codes in a primary sequence for performing slot synchronization on a primary channel and for correlating the received signal and synchronization codes in a secondary sequence for obtaining corresponding values; (1: [0033-0047], Figure 3, reference numeral 110 and 111); a detector for determining at least one maximum value from among the corresponding values and identifying a number of the synchronization codes (Figure 3, reference numeral 114); a processor for determining the frame synchronization and for identifying the codegroup based upon the number of synchronization. (Figure 3, reference numeral 116); and a controller for generating at least one enabling signal for controlling switching of said at least one correlator between the primary sequence and the secondary sequence. (Figure 3, reference numeral 116).
- 18. With reference to Claim 27, Avellone teaches of one correlator comprises a first matched filter and a second matched filter connected in series. (Figure 3, reference numerals 110 and 111).
- 19. Regarding Claims 33 35, Avellone teaches of a device where the received signal complies with the CDMA/3GPP TDD and FDD standards. (1: [0059-0065]) and UMTS, CDMA2000, IS95, and WBCDMA standards. (Abstract).

Allowable Subject Matter

20. Claims 28 - 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/768,400

Art Unit: 2616

Regarding Claims 28 - 32, though prior art teaches a second filter, no references found teach of

masking circuits connected downstream of second filters arranged either in series or parallel to the output

of a second filter or a code generator that cause the respective weights of the masking circuits to change.

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Henry Baron whose telephone number is (571) 270-1748. The examiner can normally be

reached on 7:30 AM to 5:00 PM E.S.T. Monday to Friday.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

24. Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

Bu

НВ

SEEMA S. RAO

Page 6

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600